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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/803,212	03/18/2004	Kenneth C. Shuey	ELSE-0826/E200230010	5828
23377	7590	12/12/2006	EXAMINER	
WOODCOCK WASHBURN LLP CIRA CENTRE, 12TH FLOOR 2929 ARCH STREET PHILADELPHIA, PA 19104-2891			PATEL, PARESH H	
			ART UNIT	PAPER NUMBER
			2829	

DATE MAILED: 12/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/803,212

Applicant(s)

SHUEY, KENNETH C.

Examiner

Paresh Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) 21-31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10, 15, 18 and 20 is/are rejected.
- 7) ☒ Claim(s) 11-14, 16-17, 19 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03/18/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Objections***

2. Claim 3 is objected to because of the following informalities: relationship between the claimed microprocessor, A/D converter and a digital signal processor, with a metering circuit is not clear. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-10, 15, 18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant admitted prior art and in view of Anderson et al. (US 4301508).

Regarding claim 1, Applicant admitted prior art (hereinafter APA) in fig. 1-2 discloses all the elements including an electrical power meter, comprising:

a power supply for converting alternating current (AC) voltage to a direct current (DC) voltage; an optical diode; and a metering circuit in parallel with the power supply, wherein power supply provides power to the metering circuit, as further claimed.

APA discloses all the elements except for said optical diode **in series** with the power supply and said metering circuit.

Anderson et al. (hereafter Anderson) discloses an optical diode [LED 2, see fig. 4a] in series with the power supply and metering circuit [R6], as further claimed to sense power usage pulses for microprocessor so microprocessor calculate WH or KWH for billing purpose. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the optical diode of APA as taught by Anderson to obtain advantages that Anderson have to offer.

Regarding claim 2, Anderson discloses the meter of claim 1, wherein the optical diode converts an electrical signal to an optical signal [for PHT].

Regarding claim 3, APP in fig. 1 discloses the meter of claim 1, further comprises a microprocessor, an analog-to-digital converter, a digital signal processor, and a resistive divider circuit.

Regarding claim 4, Anderson discloses the meter of claim 1, wherein the optical diode is a light emitting diode [LED 2].

Regarding claim 5, APP in fig. 1-2 discloses the meter of claim 1, wherein the AC voltage is provided by an electric power line.

Regarding claim 6, APP discloses the meter of claim 1, further comprising an optical communications port [40] in communication with the optical diode.

Regarding claim 7, APP discloses the meter of claim 1, wherein the optical communications port provides data relating to the operation of the meter [using 40].

Regarding claim 8, APP discloses the meter of claim 1, wherein the power supply is capable [V1 and +V of 39] of providing power sufficient to operate the optical diode and the metering circuit.

Regarding claim 9, APP discloses the meter of claim 1, further comprising a switch [203] in communication with the optical diode.

Regarding claim 10, APP discloses the meter of claim 9, wherein the switch comprises a transistor [203].

Regarding claim 15, APP discloses the meter of claim 9, wherein the switch is controlled by a microprocessor device [see fig. 1].

Regarding claim 18, APP discloses the meter of claim 9, further comprising a first resistor [202] in series connection with the switch.

Regarding claim 20, Anderson discloses the meter of claim 1, wherein the optical diode causes a voltage drop [drop across LED 2] of the DC power provided by the power supply.

***Allowable Subject Matter***

5. Claims 11-14, 16-17 and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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The following is a statement of reasons for the indication of allowable subject matter: No prior art has been found that meets the limitations of claim 11, calling for an electrical power meter comprising a switch in parallel with the optical diode, as further claimed.

The following is a statement of reasons for the indication of allowable subject matter: No prior art has been found that meets the limitations of claim 12, calling for an electrical power meter comprising a switch allows DC current to bypass the optical diode, as further claimed.

The following is a statement of reasons for the indication of allowable subject matter: No prior art has been found that meets the limitations of claim 13, calling for an electrical power meter comprising a switch provides DC current to the optical diode when a request for transfer is received, as further claimed.

The following is a statement of reasons for the indication of allowable subject matter: No prior art has been found that meets the limitations of claim 16, calling for an electrical power meter comprising a buffer transistor in series connection with a switch, as further claimed.

The following is a statement of reasons for the indication of allowable subject matter: No prior art has been found that meets the limitations of claim 19, calling for an electrical power meter comprising a second resistor in parallel connection with a switch, as further claimed.

***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paresh Patel whose telephone number is 571-272-1968. The examiner can normally be reached on 8:00 to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ha Nguyen can be reached on 571-272-1678. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

 12/11/06  
Paresh Patel  
Primary Examiner  
Art Unit 2829

December 11, 2006